

## ABSTRACT

## BRAGG GRATING OPTICAL FIBER

The present invention provides an optical fiber providing high photosensitivity in the absence of hydrogen loading as well as a low numerical aperture. One aspect of the present invention relates to an optical fiber including a core, the core comprising silica doped with at least about 6 mol% germania and at least about 0.9 wt% fluorine; and a cladding surrounding the core. The optical fiber of the present invention is suitable for the production of fiber Bragg gratings.